



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/280,791	03/26/99	QIN	F 09019.0058US
------------	----------	-----	----------------

CLARK G. SULLIVAN
NEEDLE & ROSENBERG
127 PEACHTREE STREET, N.E.
ATLANTA GA 30303-1811

IM22/1023

EXAMINER

PRATT, C

ART UNIT

PAPER NUMBER

1771

DATE MAILED:

10/23/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/280,791

Applicant(s)

QIN ET AL.

Examiner

Christopher C. Pratt

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 . 20) ☐ Other: _____

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-34, drawn to a product comprising a fibrous web, classified in class 442, subclass 408.
 - II. Claim 35, drawn to a method of finishing a fabric, classified in class 427, subclass various.
 - III. Claim 36, drawn to a method of making a fibrous web, classified in class 264, subclass various.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects. Invention I results in the production of a nonwoven web while invention II results in a treated web.
4. Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the claimed product can be made by another method comprising air jets used to entangle the web then heating the web or treating the web with a solution to facilitate hydrolysis of the fibers. It is noted that a product defined by the process by which it can be made is still a product claim (*In re Bridgeford*,

149 USPQ 55 (CCPA 1966)) and can be restricted from the process if the examiner can demonstrate that the product as claimed can be made by another and materially different process.

5. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects. The invention of group II results in a treated web, while the invention of group III results in the formation of a nonwoven web.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with William Johnson on 10/18/00 a provisional election was made with traverse to prosecute the invention of group I, claims 1-34. Affirmation of this election must be made by applicant in replying to this Office action. Claims 35-36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 11-14, 16, 20, 29-31, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Honeycutt (5207837).

Honeycutt's patent is concerned with the creation of a polyvinyl alcohol nonwoven fabric useful as gowns, drapes, absorbent pads, towels, and the like (col. 2, lines 46-55). Said fabric liquid entagled with water (col. 3, lines 47-50).

Said fabric composed of fibers having a denier and length anticipating applicant's claimed ranges (col. 3, lines 35-41).

Said fibers soluble in water at from 50-90 degrees C (col. 3, lines 10-11).

Said fabric having a basis weight anticipating applicants claimed range (col. 3, line 57).

With respect to claim 20, Honeycutt discloses contacting the web with water after it has been dried (claim 1).

Honeycutt discloses that the web of his invention may be formed by "hydroentangling with cold water and /or thermally bonding (col. 3, lines 48-50)."

Because of the inclusion of the word "or" Honeycutt discloses a web formed only by the process of hydroentangling.

3. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
4. Claims 1-2, 4-7, 9-12, 14, 16-17, 29-31, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamamura et al (5882780).

Yamamura's patent is concerned with the creation of a nonwoven fabric comprising poly vinyl alcohol. Said fabric formed by a water-jet treatment (col. 9, lines 2-45).

Said treatment at a pressure anticipating applicant's claimed range (col. 9, line 12).

Said web wound onto a roll (col. 9, line 26).

Said fabric dried at a temperature that exceeds the water solubility temperature of the PVA (col. 9, lines 40-46).

Said fabric dried by heated air (col. 9, line 28).

With respect to claims 9-10, said fibers have a degree of hydrolysis of 100% (col. 9, lines 43-46).

The poly vinyl alcohol fibers having a denier and length anticipating applicant's claimed ranges (col. 9, lines 45-49 and col. 10, lines 3-9).

Said fibers soluble at 90 degrees C (col. 9, lines 44-45).

Said fabric having a basis weight anticipating applicant's claimed range (col. 9, line 64).

Said web further containing polyester fibers (abstract).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honeycutt (5207837).

With respect to claim 5, Honeycutt discloses the process of hydroentangling but does not seem to disclose the amount of water pressure used. It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the water pressure used by Honeycutt, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105, USPQ 233.

With respect to claim 15, Honeycutt discloses a web having a thickness of 1 mm (col. 3, line 53), but does not seem to disclose the thickness claimed by applicant. It would have been an obvious matter of design choice to decrease the thickness of Honeycutt's web, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura et al (5882780).

Yamamura does not seem to disclose the thickness claimed by applicant. It would have been an obvious matter of design choice to decrease the thickness of Yamamura's web, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

8. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over both Honeycutt (5207837) and Yamamura et al (5882780).

Honeycutt teaches the use of his web as a diaper (col. 2, line 51). It would be obvious to a person of ordinary skill in the art that the fabric of Yamamura could be used in a diaper. The examiner takes official notice that it is extremely common in the art to utilize an impermeable film composed of polyethylene, polypropylene, or polyester in the diaper art.

9. Claims 3, 8, and 21-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over both Honeycutt (5207837) and Yamamura et al (5882780) in view of Chen et al (5990377).

Neither Honeycutt nor Yamamura seem to disclose the use of fluorocarbon and wax as a finishing formulation.

Chen's patent is concerned with the creation of nonwoven web useful as diapers and wipes (col. 1, lines 7-14). Chen teaches the use of a mixture of wax and

fluorocarbon (col. 33, lines 50-55). It would have been obvious to a person having ordinary skill in the art to utilize the hydrophobic materials of Chen in the webs of Honeycutt and Yamamura. Such a combination would have been motivated by the reasoned expectation of limiting lateral wicking of liquids to prevent seepage or leakage from the edges of an absorbent article (col. 33, lines 2-7). It would also have been obvious to one having ordinary skill in the art at the time the invention was made to vary the amount of these materials, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105, USPQ 233.

With respect to the "cross-lapping" limitation of claim 3, it is the examiner's position that the web of Honeycutt and Yamamura in view of Chen is identical to or only slightly different than the web prepared by the method of applicant, because both webs have the same structure and are composed of the same materials as set forth above. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious variant from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). Honeycutt and Yamamura in view of Chen either anticipate or strongly suggest the claimed subject matter. It is

noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Honeycutt and Yamamura in view of Chen.

With respect to the stretching limitation of claim 3, both Yamamura and Chen teach the use of stretching (col. 11, lines 56-67 and col. 5, line 12, respectively). It would have been obvious to a person having ordinary skill in the art to stretch the webs of Honeycutt and Yamamura. Such a modification would have been motivated by the reasoned expectation of providing apertures to the web.

With respect to claim 8, the degree of polymerization may be inherent in the polyvinyl alcohol fibers of Honeycutt and Yamamura. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the degree of polymerization, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 32, the examiner takes official notice that it is common in the art to saturate a wipe at least 25% with a solvent.

With respect to claim 33, applicant provides a recitation of an intended use, but provides no structure limitations to distinguish the claim from the prior art and therefore, is not given any patentable weight.

With respect to claims 24-28, it is the examiners position that the web of Honeycutt and Yamamura in view of Chen inherently possesses applicant's claimed properties because all the elements of applicant's claims are rendered obvious by the combinations set forth above.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Honeycutt (5650219) seems to disclose elements of applicant's invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.

Christopher C. Pratt
October 19, 2000

Elizabeth M. Cole
ELIZABETH M. COLE
PRIMARY EXAMINER